

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number  
**WO 2005/083591 A2**

(51) International Patent Classification<sup>7</sup>: **G06F 17/30**

(21) International Application Number:  
PCT/GB2005/000673

(22) International Filing Date: 23 February 2005 (23.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0404292.5 26 February 2004 (26.02.2004) GB

(71) Applicant (for all designated States except US): **BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY** [GB/GB]; 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MAJIDIAN, Andrei** [GB/GB]; 56 Milton Street, Ipswich Suffolk IP4 4PR (GB).

(74) Agent: **WILLIAMSON, Simeon, Paul**; PP: C5A, BT Centre, 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

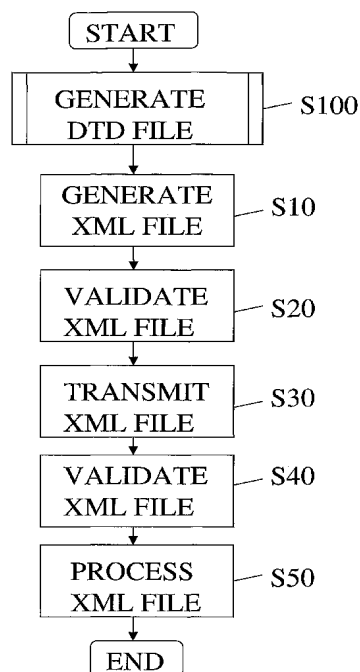
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING INFORMATION



(57) **Abstract:** A method of transmitting information between first and second electronic devices. The method includes generating (S100) a validator file operable to validate or to not validate eXtensible Markup Language, XML, files according to their structure, transmitting to the second device the validator file itself or information to enable the validator file to be acquired by the second device, generating (S10) an XML file which contains the information to be transmitted structured in such a way that it is validatable (S20) by the generated validator file, transmitting (S30) the XML file to the second device and validating (S40) the XML file received by the second device, wherein the validator file is generated by: acquiring and parsing an example XML file, the XML file having a structure which the validator file to be generated should cause to be validated, to generate a tree structured file comprising a root node and one or more subsidiary nodes each of which corresponds to an element within the example XML file and has an associated child and attribute list which contain the names of zero or more children nodes and zero or more attributes respectively; acquiring and parsing any additional example XML files to generate corresponding additional tree structured files; traversing the or each tree structured file to generate an intermediate structure comprising groups of nodes in which, each time a node is encountered which does not have the same name as any previously encountered node, a new group is created in the intermediate structure and one or more details of the node in question are stored in the group, and each time a node is encountered which does have the same name as any previously encountered node its child and attribute lists are compared with those of the or each previously encountered node having the same name and if there is a match, no further entry is made in the group, but if there is a mismatch, then a new entry comprising one or more details of the node is made within the same group as the previously encountered node of the same name; and generating the validator file based upon the intermediate structure.